

5344

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: NEW YORK

DESCRIPTIVE REPORT

~~Topography~~
~~Hydrography~~

Sheet No. 9 5344

LOCALITY

Long Island.

Montauk Point.

19 33

Add'l work 1934

CHIEF OF PARTY

A. P. Ratti.

5344

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5344

HYDROGRAPHIC TITLE SHEET

1271-2

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 9

REGISTER NO. 5344

State NEW YORK

General locality Long Island.

Locality Montauk Point.

Scale 1:20,000 Date of survey Oct. 10 - Nov. 9, 1933 ~~1934~~

Vessel HYDROGRAPHER - Launch, Four Winds & Nellie Grey W

Chief of Party A.P. Ratti.

Surveyed by J.C. Tribble.

Protracted by J.J. Rosa; W.H. Jennings.

Soundings penciled by C.R. Smith.

Soundings in ~~6 fathoms~~ feet ~~1000~~

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by W.H. Bamford & P.H. Scherr

Verified by W.H. Bamford & P.H. Scherr

Instructions dated Feb. 25, 1933, ~~1934~~

Remarks:

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

SEP 17 1934

REG. NO.

HYDROGRAPHIC TITLE SHEET

Acc. No.

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. _____

REGISTER NO. 5344

State New York

General locality Eastern End of Long Island

Locality Montauk Point

Scale 1:20,000 Date of survey July 7 to Aug. 9, 19 34

Vessel Field Party No. 5.

Chief of Party Wm. D. Patterson, Lieut.,

Surveyed by Lieut. (j.g.) George E. Morris, Jr., & D. S. Ling.

Protracted by L. S. Straw

Soundings penciled by L. S. Straw

Soundings in 141/1000 feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by _____

Inked by L.M. Zeskind

Verified by L.M. Zeskind

Instructions dated _____ May 14, 19 34

Remarks: Supplemental work on Sheet 5344 to be plotted in

Washington Office on original smooth sheet.

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SHEET No. 9 (Field No.)

VICINITY OF MONTAUK POINT, L. I., N. Y.

DATE OF INSTRUCTIONS

Director's instructions for this survey are dated
February 25, 1933.

LIMIT AND EXTENT

This report covers the survey of the area along the southeast, east and northeast shore of Long Island, N. Y. in the vicinity of Montauk Point. Work extends on the south shore from a point about 4 miles (nautical) westward of Montauk Point to Montauk Point and from the beach to about 2-3/4 miles (nautical) offshore.

On the north shore work extends from Montauk Point to Culloden Point and from the beach to about 2 miles (naut.) offshore.

SURVEY METHODS

The method employed on this survey was by visual fixes using signals located by triangulation and topography. The soundings were taken with hand lead and line marked in fathoms and feet.

The signals used were located by triangulation of 1911, 1921, 1932 and 1933; and by topography of 1933, as shown on topographic sheets "K" and "L". See volume 1, page 1, for list of signals used.

On October 31, 1933 a floating signal off Montauk Point was used. Positions of this signal were taken throughout the day and recorded in the sounding volume, see Page 17, volume 3 (Blue). In plotting the positions where this signal was used, its location was interpolated to correspond to the time of the position.

A total of 5 buoys (aids to navigation) were located by hydrographic fixes in this area.

DISCREPANCIES

A discrepancy was found in the location of Blackfish Rock. This survey located this rock 130 meters southeast from chart location. See "DANGERS" for location.

Discrepancy not this large

Rog

Latitude 41° 01' (960 meters), Longitude 71° 53' (1063 m), positions 95E to 100E. The soundings on this cross line run one to two feet shoal of adjacent soundings. This difference is attributed to ground swells and moderate seas. The soundings on E day are believed to be correct since the sea was calm at the time.

DANGERS

Latitude 41° 02' (1300 meters), Longitude 71° 53' (674 meters), approximate, two meters west of position 1C (Blue) the remnants of an old steam engine extend about one foot above water at high tide.

Latitude 41° 04' (1495 meters, Longitude 71° 52' (1379 meters), position 26D is the location of Blackfish Rock which is covered by approximately $1\frac{1}{2}$ feet of water at low water. This is marked by a black can buoy 130 meters to the north.

Latitude 41° 05' (918 meters), Longitude 71° 54' (290 meters), a position at which there is an indication of Shagwong Rock with sounding of 12 feet at M.L.W. Present chart shows a depth of 7 feet (60 meters north of this sounding). This point is marked by a red and black buoy 300 meters north of east of this sounding. *in about the same position*

Latitude 41° 04' (¹⁵⁸⁰~~1625~~ meters), Longitude 71° 53' (1263 meters), is the location of a submerged rock noticed while running a sounding line and it has about 2 feet of water covering it. Location was noted on boat sheet for recovery by smaller boat party.

Latitude 41° 05' (185 meters), Longitude 71° 54' (zero meters), is the location of a sandy shoal which extends 300 meters northeast from Shagwong Point., and this point should be given a wide berth. Breakers, at this point, and a tide rip is encountered going east, extending offshore by red and black buoy.

Latitude 41° 05' (300 meters), Longitude 71° 55' (400 meters), is the location of the end of a fish pound carrying a night light. Several fish pounds exist in this area. This particular pound extends farthest offshore and is the one most easterly. Other pounds are between this one and the channel entrance to Great Pond. Boats unfamiliar with this area should keep outside the range of the red and black buoy off Shagwong Point and bell buoy outside channel entrance to Great Pond.

REMARKS

This survey was begun with normal lines spaced 200 meters apart, but due to the tide effects on the boat east of Shagwong reef, satisfactory lines were not obtained. Consequently, the survey was continued with a system of lines parallel to the shore.

It was intended to extend these lines out to include the northern extremity of Shagwong Reef, and then to fully develop all indications of shoals or dangers; particularly Shagwong Rock, Washington Shoal, and Shagwong Reef.

This territory was developed secondary to survey on Sheet 8, southeastern shore of Long Island and lack of time prevented completion,

The area extending north from Shagwong Point is decidedly rocky, and the writer feels that a wire drag survey should be made in this vicinity to thoroughly prove up any submerged rocks.

In any subsequent offshore development of this area permanent signals may be used with the addition of a large tripod signal over station "Shag 2, 1933".

A list of these permanent signals is included in this report.

LIST OF RECOVERABLE OBJECTS THAT MAY BE USED IN CONTINUING
 WORK ON NORTHEAST SHORE OF MONTAUK, LONG ISLAND, NEW YORK.

(Note); These prominent objects affect chart No. 1211.
 All positions based on N. A. Datum 1927.

Signal	Position						Method of Deter- min- ation.
	Latitude			Longitude			
	°	'	D.M.Meters	°	'	D.P.Meters	
LIT	41	04	466.2	71	51	637.1	Tri.
INN	41	04	510	71	51	1355	Top.
CHIM	41	03	582.4	71	54	43.3	Tri.
LOD	41	03	1167.4	71	56	1310.1	"
GUN	41	04	273	71	55	1346	Top.
RAC	41	04	967	71	56	446	"
POP	41	04	1408	71	56	370	"
RIP	41	04	1354	71	56	515	"
Necessary tripod signal to be erected							
SHAG 2	41	05	202.6	71	54	380.6	Tri.
LIST OF RECOVERABLE OBJECTS THAT MAY BE USED IN CONTINUING WORK ON SOUTHWEST SHORE OF MONTAUK, LONG ISLAND, NEW YORK.							
CG DITCH PLAINFS	41	02	733.0	71	55	55.2	Tri.
EASTMOST HOUSE							
LARGE CHIMNEY							
1911	41	02	1133.3	71	54	178.5	Tri.
RED ROOF, PEAK							
1911	41	03	19.6	71	52	1082.4	Tri.
SUN	41	03	545.0	71	52	634.0	Top.
KID	41	03	1517.0	71	51	1183.0	"
KEG	41	04	16.0	71	51	906.0	"

DESCRIPTION OF SIGNALS

"LIT"-is the Montauk Point Lighthouse located by 1882-1932 triangulation, and is located at the eastern extremity of Long Island.

"INN"-is a red brick chimney on the north side of small cottage inn situated about 0.5 mile west of Montauk Point Lighthouse. on top of high knoll.

"CHIM"-is a concrete chimney, only large one on large old building 2.5 miles southwest from Montauk Point Lighthouse on north side of the highway, and 0.7 mile southeast from Prospect Hill, appearing in a valley from the sound. It was located by 1911 triangulation.

"LOD"-was located by 1911 triangulation. For hydrographic purposes the chimney on south side of house was used for signal, being practically over station "LOD" which is set in first floor of the house. This house is located about 5 miles west from Montauk Point Lighthouse, 0.8 mile north of Montauk Manor, 1.3 miles southwest from entrance to Great Pond, on northeastern extremity of range of hills; and appears from the sound as first house south from Culloden Point on highest ground.

"GUN"-is a small lighthouse attached to the buildings of the Montauk Yacht Club in Great Pond, and is white in appearance.

"POP"-is the flashing light at the north end of the east breakwater at entrance to Great Pond.

"RIP"-is the flashing light at the north end of the west breakwater at entrance to Great Pond.

"RAC"-is a cupola on small white shingled house just inside the breakwater at Great Pond, on the west side of the channel. This shows up only near the entrance to the channel.

"SHAG 2"-is a triangulation station located in 1933 on Shagwong Point, and is necessary as a center object in surveying off shore. A tripod with plenty of white cloth at its base is necessary.

Lat 41° 05' +
Long 71° 54' +

DESCRIPTION OF SIGNALS

"Ditch Plain CG-FS"-is a steel frame tower and flagstaff located on the lawn of the Ditch Plain Coast Guard Station. The station is located on the beach just south of Montauk Village.

"Eastmost house, large chimney 1911"-is a large chimney on the east house of a group of houses on the bluff and back from the beach about 0.7 mile east of Ditch Plain Coast Guard Station. It is a large two story house of a dark grey color.

"SUN"-is the south chimney of a stone house on the bluff about 1.2 mile west of Montauk light. The chimney is of stone and built up from the ground alongside the south end of the house.

"KID"-is a chimney on a small house high on the bluff about 0.6 mile southwest of Montauk light. The house is a dark grey color with green shutters.

"KEG"-is the peak of a large Dutch windmill just south of Montauk light.

REDUCTION OF SOUNDINGS

Plane of reference-M.L.W. Reducers furnished by
the Washington Office; inferred from observed tides at
Sandy Hook.

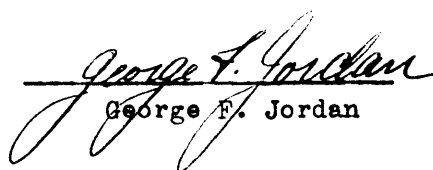
STATISTICS SHEET NO. 9 (Field No.)

(In addition to those included in
report of Ensign John C. Tribble, Jr.)

Date 1933	Letter (red)	Volume	Positions	Soundings	Miles Stat.
Sept. 28	A	1	117	629	26.7
Oct. 9	B	1	11	61	2.5
" 12	C	1	70	388	14.8
" 16	D	1	106	575	17.3
" 17	E	1&2	123	622	27.3
" 20	F	2	63	327	14.7
" 27	G	2	5	19	1.1
Nov. 3	H	2	106	476	25.6

TOTALS	Days 8	Volumes 2	Positions 601	Soundings 3097	Statute Miles 130.0
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Respectfully submitted


George F. Jordan

Examined and approved



A. P. Ratti

Lieut. C. & G. Survey.

STATISTICS FOR SHEET 9 (Field No.)

BOAT, NELLIE GREY W.

Date 1933	Letter	Volume	Positions	Soundings	Miles Stat.
Oct. 10	A	1	80	299	17.4
" 16	B	1	169	541	34.4
" 18	C	1	176	401	26.6
" 19	D	2	132	326	23.4
" 23	E	2	138	383	21.2
" 30	F	2	139	497	20.9
" 31	G	2	131	582	26.0
Nov. 1	H	3	91	314	14.0
" 3	J	3	150	411	22.5
" 9	K	3	79	242	8.2
TOTALS			1285	3996	214.6
" Four Winds			601	3097	130.0
TOTAL for Sheet			1886	7093	344.6

L610

January 9, 1934

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
5 volumes of sounding records for

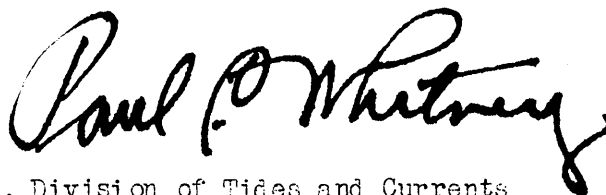
HYDROGRAPHIC SHEET 5344

Locality Montauk Point, Long Island, N. Y.

Chief of Party: A. P. Ratti in 1933
Plane of reference is mean low water
ft. on tide staff at
ft. below B. M.

NOTE: Tide reducers were furnished field party from office and were derived from observations at Sandy Hook, N. J., through the ratio of ranges (0.45). Time of tide 30 minutes later than at Sandy Hook. Height of mean high water above plane of reference is 2.0 feet.

Condition of records satisfactory except as noted below:

A handwritten signature in cursive script, reading "Paul P. Whitney".

Chief, Division of Tides and Currents

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 5344

The following statistics will be submitted with the
cartographer's report on the sheet:

Number of positions on sheet	1886
Number of positions checked	44
Number of positions revised	16
Number of soundings recorded	7093
Number of soundings revised	31
Number of signals erroneously plotted or transferred	✓

Date: January 31, 1934.

Cartographer: Paul W. Scherr.

PARTIAL REPORT ON H. 5344

JAN. 18, 1934.

1./ The protracting on this sheet was found to have been rather carelessly done - of the 37 positions checked, a total of 16 were found to have been erroneously plotted and were replotted. The position numbers were fairly small but were located too near the position pin prickpoints, portions of the position numbers being obliterated upon inking the soundings. A great number of the position pin prick holes were too large.

2./ The spacing of soundings was found to have been fairly well done except where the time interval was irregular in which case the irregularity was ignored.

3./ Triangulation stations were encircled with the regulation red triangle but in addition a red circle was circumscribed

3.
CONT'D

around the triangle - this is ^{it} contrary
to the instructions contained
in the Hydrographic Manual
Ref TP 23 H.M.

4./ The six buoys indicated on the
boat sheet with blue circles -
were shown on the smooth sheet
in a like manner but as these
buoys (with the exception of the buoy
east of Montauk Point light House
i.e. hydrographic signal HAW) were
not used as hydrographic
signals - the blue circles were
removed and the proper buoy
symbols placed in their stead.

5./ Triangulation station SHAG 2 (1933)
was used throughout the
sounding volumes as SHAG and
also as SHAG-2. The original
station SHAG was not recovered
in 1933. (it is noted as being lost)
but the new Δ SHAG 2 was located

5.
CONTR.

and used in the hydrographic work in this vicinity.

Both of these stations were plotted on both the smooth sheet and the boat sheet by the field party but the original station SHAG was removed by the verifier - leaving only SHAG 2 (1933) on the smooth sheet.

6/ The 30 ft. shoal charted on chart 1211 as MONTAUK SHOAL in Lat $41^{\circ}01'8''$ and Long. $71^{\circ}50'$ (approx.) were not verified by this survey. The shallowest depth found being 35 ft. No specific search was made for the least water.

7/ Shagwong Rock shown on chart 1211 with least depth of 7 ft in Lat $41^{\circ}05' + 870$ m and Long $71^{\circ}54' + 200$ m (approx.) was not verified by this survey. The least depth found being 12 ft. approximately 100 m west by northwest of the charted 7 ft. shoal.

Page 4

8./ It is noted in the Descriptive Report by the field party that the position of Blackfish Rock as located by this survey was 130 meters southeast of its charted position. This statement was found to be erroneous. The position of this rock as shown on this sheet is substantially the same as the charted position. The depth of water over this rock was approximated at $1\frac{1}{2}$ ft by the field party. A sounding was taken 5 ft. north of the rock and a depth of 12 ft was obtained. The 12 ft sdg. was shown on the smooth sheet immediately above the sunken rock symbol.

9./ The submerged rock in Lat. $41^{\circ}-04' + 1580$ m and Long $71^{\circ}-53' + 1263$ m (approx.) was seen by the surveying party on the vessel FOUR WINDS while

PAGE 5.
9. CONTD.

running sounding line D (red) - between positions 18 D and 19 D (red). This rock apparently was not investigated at a later date by the smaller boat party - as was planned.

10. / NOTE.

This sheet was plotted on paper of a very poor grade. When the soundings were inked - the ink ran badly and erasing instead of improving the inking surface - as is generally the case - made the surface worse.

Respectfully submitted

W H Bamford

SECTION OF FIELD RECORDS

Report on H-5344
Chief of Party - A.P.Ratti
Protracted by J.J.Rosa, W.H.Jennings
Verified and inked by W.H.Bamford
P.H.Scherr

Surveyed in Oct.10-Nov9,1933.
Surveyed by J.C.Tribble
Soundings plotted by C.R.Smith
Topography inked by Field Party

1. - The Records conform to the requirements of the General instructions.
2. - The usual depth curves were drawn. The 60 ft. curve, Lat. $41^{\circ} 03'$, Long. $71^{\circ} 50'$, is shown completed with a dotted line as former surveys indicate.
3. - The field plotting was completed to the extent prescribed in the General Instructions.
4. - The office draftsman did over no part of the drafting done by the field party.
5. - A junction of the sheet with H - 5325 was made on H - 5325. A junction with H - 5326 was made on H - 5326. This junction H - 5326 was made by protracting the positions and plotting the soundings. The only control not on H - 5326 which was needed is signal Shag 2 and this was plotted on an adjoining sheet in order to be able to use it as a control. The junction is satisfactory.

6. - In verifying the soundings, it was found that, where they became congested, they were penciled incorrectly, as instead of giving two consecutive soundings of different depths as stated in the records, a mean of the two soundings was penciled at approximately the point between the two. This was done in thirty cases.

All the bottom characteristics as given in the records were not penciled. Those that were had been placed inaccurately.

The crossings were consistent.

Signal Haw is a floating signal, a temporary signal, not to be confused as a permanent buoy or an aid to navigation. (Page 17, vol. 3) and Page 1 of the Descriptive Report.

7. - The quality of the drafting was good.

Respectfully submitted,

Paul L. Eckert.

February 5, 1934.

SECTION OF FIELD RECORDS
Review of Hydrographic Sheet No. 5344.
Montauk Point, Long Island, New York.
Surveyed in 1933
Hand lead soundings.
Instructions dated February 25, 1933 (R. P. Eyman).

Chief of party - A. P. Ratti.
Surveyed by - J. C. Tribble.
Protracted by - J. J. Rosa, W. H. Jennings.
Soundings plotted by - C. R. Smith.
Verified and inked by - W. H. Bamford, P. H. Scherr.

1. The records conform to the requirements of the Hydrographic Manual.
2. The plan and character of the survey satisfy the specific instructions.
3. The sounding line crossings and agreement of adjacent sounding lines is fairly consistent in some areas while in others they do not agree closely. The bottom close inshore, off Montauk Point, and along the south shore is very irregular.
4. The information is sufficient for drawing the usual depth curves within the limits of the work with the exception of the low water curve and parts of the six and twelve foot curves close inshore.
5. The only contemporary surveys adjoining this work are H. 5326 at the entrance to Great Pond and H. 5325 which joins the work off the south coast on the westward. Both junctions are satisfactory.
6. Previous surveys.

The wire drag survey of 1916, H. 3907, is the most recent of the previous surveys. All shoal soundings found by the drag have been added to this sheet, (H. 5344), in red and should be retained on the chart.

In the area north of Shagwong Point in Block Island Sound the development of shoals and rocks was not attempted on the new work and for that reason the shoaler depths as shown on the old surveys, H. 86, H. 2313, H. 1529a and H. 1539 should be retained on the chart for the present. This applies to the soundings in the vicinity of Shagwong Reef, Washington Shoal and Shagwong Rock which will be more fully developed next season.

The field party calls attention to a discrepancy between the position of Blackfish Rock as charted and as located by this survey. The original source of the position of Blackfish Rock on the chart could not be traced as the rock is not shown on any of the old hydrographic sheets and was carried on the chart before the inauguration of the present system of standards. In any case the discrepancy is not nearly as great as stated in the descriptive report and it is recommended that the position of the rock as located on this sheet, H. 5344, be accepted.

In the vicinity of Montauk Shoal the soundings on the new work indicate that changes may have occurred. They are consistently deeper and

H. 5344 - 2.

show little indication of the shoals found on the surveys of 1895 and 1896, H. 2228 and H. 2261. However the development is not sufficient to definitely disprove the existence of these shoals and they should be retained on the chart until verified or more thoroughly disproved.

7. Chart changes.

Since additional work will be done in this area most of the critical soundings should be continued on the chart until it is completed but in the flat areas the recent work, H. 5344, should supersede the old surveys.

A 54 foot sounding is shown on Chart 1211 in lat. $41^{\circ}00'.9$, long. $71^{\circ}52'.3$. The original soundings were two of 59 feet on the survey of 1838, H. 74, and a 9 fathom spot was charted. When the depth unit of the chart was changed from fathoms to feet, the sounding became 54 feet. The sounding should be charted as 59 until further development is done.

8. The work on this sheet within the limits of the hydrography performed is not considered complete. There was insufficient development to discredit shoal soundings charted.

9. Additional work recommended.

It is considered that the area around Montauk Point is important for navigation, both yachting and for naval manoeuvres, and the extension of the 1916 dragged areas is recommended.

(1) The area off Shagwong Point should be dragged to a depth of 16 feet to a satisfactory junction with the wire drag survey of 1916, H. 3907. *See Review H-5344 (Additional Work Wire Drag.)*

(2) The area east of Montauk Point should be dragged using the depths shown on the survey of 1895 (H. 2228) as a base.

(3) The extension of the drag along the south shore for a distance westward of Montauk Point is considered logical in connection with the above and the re-dragging of the shoal areas found on earlier surveys (H. 2228 and H. 2261) on Montauk Shoal because these soundings have not been disproved by this survey.

(4) The 10 foot rock approximately 600 meters, 228° (true) from Shagwong Reef should be located and examined. The position of this rock is not definitely fixed by chart letter 172 (1931).
(This rock is a part of Shagwong Reef)

(5) The sunken rock which was shown on the boatsheet in lat. $41^{\circ}04'.85$, long. $71^{\circ}53'.9$ should be located and examined.

(6) The rock awash shown on H. 2228 and H. 2261 approximately 227 meters 31° (true) from Montauk Point L. H. should be investigated. If not found a recommendation as to its retention or removal from the chart should be made.

see review add. Work 5344, attached.

H. 5344 - 3.

(7) The following rocks along the south shore were placed on the sheet from indefinite notes in the sounding records. They should be more definitely located and the depth over them determined:



Rock in Lat. $41^{\circ}-02' .35$, Long. $71^{\circ}-54' .5$

Rock in Lat. $41^{\circ}02' .17$, Long. $71^{\circ}-55' .4$


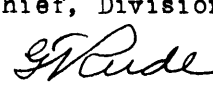
Rock in Lat. $41^{\circ}-02' .1$, Long. $71^{\circ}-55' .65$.

(8) It is believed that the present drag limits in Block Island Sound should be extended southward and westward to the eastern side of Gardiners Island.

Reviewed by - R. L. Johnston.


L. O. Colbert,
Chief, Section of Field Records.

Chief, Section of Field Work.

Examined and approved:


Chief, Division of Charts.

Chief, Division of H. & T.

The above additional work is considered to have been satisfactorily accomplished except as noted in the paragraph under "Additional Work Recommended" in the review of H-5344 (Additional Work, 1934).

*See review Add. Work,
5344, attached.*

5344

Additional work

WIRE DRAG SURVEY.

Form 504 Rev. Dec. 1933	
DEPARTMENT OF COMMERCE U.S. COAST AND GEODETIC SURVEY R. S. PATTON, DIRECTOR	
DESCRIPTIVE REPORT	
<i>Topographic</i> <i>Hydrographic</i>	Sheet No. 5344
State <u>NEW YORK</u>	
LOCALITY	
<u>Eastern End of Long Island</u>	
<u>Montauk Point</u>	
<u>1934</u>	
CHIEF OF PARTY	
<u>W. D. Patterson</u>	

U. S. GOVERNMENT PRINTING OFFICE: 1934

5344

WIRE DRAG SURVEY.

Additional work

WIRE DRAG SURVEY

5344

Additional work

5344

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: New York

Additional work

DESCRIPTIVE REPORT

/7777777777/ } Sheet No. 5344
Hydrographic }

LOCALITY

Vicinity of Montauk Point,

Long Island.

1934

~~Includes WIRE DRAG ADUT WORK 1934.~~

CHIEF OF PARTY

Wm. D. Patterson, Lieut.

Additional work

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES	REG. NO.
SEP 17 1934	
Acc. No.	

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Additional Work Wire Drag.

Field No. _____

5344

REGISTER NO. ~~3007~~ - Wire Drag.

State New York

General locality Eastern End of Long Island

Locality Montauk Point

Scale 1:20,000 Date of survey July 23 to Aug. 1, 1934

Vessel Field Party No. 5.

Chief of Party Lieut. Wm. D. Patterson

Surveyed by Lieut. (j.g.) George E. Morris, Jr.

Protracted by _____

Soundings penciled by _____

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by _____

Inked by _____

Verified by J. A. McCormick

Instructions dated _____ May 14, 1934

Remarks: Supplemental Wire Drag work to be plotted on original smooth sheet in the Washington Office.

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SHEET No. 5344

1934 SUPPLEMENT

VICINITY OF MONTAUK POINT, L. I., N.Y.

DATE OF INSTRUCTIONS

Director's Instructions dated May 14, 1934.

SURVEY METHODS

Positions were obtained by sextant angles between shore objects located by triangulation and topographic surveying methods. Off Montauk Point, one of the launches was anchored and used as a signal. Depths were measured by use of a mahogany phosphor bronze stranded-wire center leadline marked in fathoms and feet.

The portable wire drag was used to examine charted dangers on Shagwong Reef and Shagwong Rock. See Wire Drag Vol. 1, sheet 3907.

DISCREPANCIES

No discrepancies were found. ✓

DANGERS

The rock in Latitude $41^{\circ} 02.35'$, Longitude $71^{\circ} 54.5'$ was definitely located, sounding Vol. 1, Page 6, Rock "C". Another rock, awash at low water, was located about 200 meters to eastward, Position 10A. ✓

165

The rock in Latitude $41^{\circ} 02.1'$, Longitude $71^{\circ} 55.65'$ was definitely located, sounding Vol. 1, Page 4, Rock "A". This rock is awash at low water. ✓

The rock in Latitude $41^{\circ} 02.17'$, Longitude $71^{\circ} 55.4'$ was definitely located, sounding Vol. 1, Page 8, Rock "B". ✓

Two submerged rocks in Latitude $41^{\circ} 04.1'$, Longitude $71^{\circ} 51.3'$ were definitely located, sounding Vol. 1, Page 19. ✓

These two rocks plotted so close together that it was only possible to show the least depth and Rk.

R. L. J.

2

DANGERS (continued)

Two rocks^{awash} in Latitude $41^{\circ} 04.4'$, Longitude $71^{\circ} 51.4'$ were definitely located, sounding Vol. 1, Pages 36 & 37.

A rock with two feet over it in Latitude $41^{\circ} 04.8'$, Longitude $71^{\circ} 53.85'$ was definitely located, sounding Vol. 3, Page 3.

The charted 18 foot spot in Latitude $41^{\circ} 05.1'$, Longitude $71^{\circ} 52.6'$ was investigated with the hand lead. A sounding of 16 feet in Latitude $41^{\circ} 05.1'$, Longitude $71^{\circ} 52.8'$ the fourth sounding after position 13C (green letter) and a sounding of 17 feet in Latitude $41^{\circ} 05.1'$, Longitude $71^{\circ} 52.5'$ the first sounding after position 8C (green letter) were found. No shoaler depths were found by drift sounding.

Additional sounding on Montauk Shoal checked the depths found in 1933 very closely. A sounding of 32 feet in Latitude $41^{\circ} 01.8'$, Longitude $71^{\circ} 49.9'$ the second sounding before position 13F (green letter) was found. A shoal sounding of 37 feet in Latitude $41^{\circ} 02.2'$, Longitude $71^{\circ} 50.0'$ the third sounding after position 23F (green letter) was found. No shoaler depths were found by drift sounding.

A search for the charted 54 foot sounding in Latitude $41^{\circ} 00.9'$, Longitude $71^{\circ} 52.3'$ was made with the hand lead. A sounding of 60 feet, position 15B (green letter) was the least depth found. The area is rocky. Three fourths of an hour was spent in drift sounding over the area. *The 54 foot sounding originates with a 59 foot sounding on H. 74 (see para 7 of the original review) R.L.G. Chart the 60*

A search for the charted 60 foot sounding in Latitude $41^{\circ} 01.6'$, Longitude $71^{\circ} 52.6'$ was made with the hand lead. No shoaler sounding than 65 feet, the two soundings between positions 11A & 12 A (green letter) was found. The area is rocky.

Three quarters of an hour was spent in drift sounding over the charted position of Shagwong Rock. The portable wire drag was used and the least depth obtained was 12 $\frac{1}{2}$ feet, the sounding on position 2D (green letter). The drag set at 10 feet passed over the charted position of the rock.

The portable wire drag was used to locate the charted 7 foot rock on Shagwong Reef. A depth of 8 feet was found on it, position 1E (green letter).

The 10 foot rock approximately 600 meters 228° true from Shagwong Reef was located by the portable wire drag. A depth of 9 feet was found on it, position 5E (green letter).

In addition to the sounding lines run over the area of the charted position of Great Eastern Rock, an hour was spent in drift sounding. The shoalest depth of 24 feet was obtained on position 107K (green letter). The Master of the Lighthouse Tender "Hawthorn" obtained a least depth of 27 feet when replacing the can buoys on August 9th.

COMPARISON WITH PREVIOUS SURVEYS

The depths obtained by this survey indicate that the area east of Montauk Point has changed considerably since the chart was made. Charted shoals were searched for within the area surveyed. In general, the current has worn the shoals down and increased the depths. It is recommended that the survey be extended to the eastward.

WIRE DRAG GROUNDINGS

All groundings were investigated and the soundings were recorded in the Sounding Volumes for this sheet. Wire drag strips can be plotted on sheet 3907.

SMOOTH SHEET

No smooth sheet was prepared for this work since we had verbal instructions that this additional work would be plotted on the former sheet 5344 by the office.

Respectfully submitted,

George E. Morris, Jr.
George E. Morris, Jr.,
Lieut. (j.g.), U.S.C. & G. Survey.

Approved,

Wm. D. Patterson
Wm. D. Patterson,
Lieut., U.S.C. & G. Survey,
Chief of Field Party No. 5.

DESCRIPTIVE REPORT TO ACCOMPANY

5344
WIRE DRAG SHEET No. ~~3907~~

BLOCK ISLAND SOUND.

DATE OF INSTRUCTIONS

Director's Instructions, dated May 14, 1934.

SURVEY METHODS

A small portable wire drag was used. A drag of three 100 foot sections with 100 foot tow lines was used. The Nellie Grey W. acted as guide launch and the Leila T. as end launch. Each launch obtained three point sextant fixes on shore objects for position. These fixes were taken at the same time on both launches at a signal given from the guide launch. A skiff and outboard motor was used as a tender.

COMPARISON WITH PREVIOUS SURVEYS

The wire drag was used to investigate charted dangers which were not found with the leadline by the hydrographic party,

not on H 5344
Constellation Rock in Latitude $41^{\circ} 10.5'$, Longitude $72^{\circ} 06.6'$ has a charted depth of 17 feet. A least depth of 26 feet was found by the hydrographic party. The drag was set at 26 feet but when being towed against the tidal current lifted to a minimum effective depth of 18.5 feet. Most of the drag strips were run with the current and had an effective depth of more than 20 feet. In addition to the plotted drag strips the area was fairly well covered by the drag when the launches were maneuvering to get in position to run lines. The 17 foot rock was not found. The Master of the Lighthouse Tender "Hawthorn" stated that he had never found the 17 foot depth when setting the marking buoy. It is believed that the strong currents which run through this part of the bay have worn the shoal away.

on H 5344
Shagwong Rock in Latitude $41^{\circ} 05.5'$, Longitude $71^{\circ} 54.2'$ has a charted depth of 7 feet. This was investigated with the drag set at a minimum effective depth of 12.5 feet. The drag grounded at position 23A (Vol. 1, Page 7). The grounding was investigated with the hand lead and a least depth of 12.5 (Sheet 5344, Vol. 1, Page 23) was obtained. The Master of the Lighthouse Tender "Hawthorn" stated that he had failed to find the 7 foot depth when setting the marking buoy.

See also
page 2,
par. 7 of
Descriptive
Report
ad. W.K. 1934
Set 7 ft.

COMPARISON WITH PREVIOUS SURVEYS (continued)

The charted 7 foot and 10 foot rocks on Shagwong Reef were found with the drag. A least depth of 8 feet was found on the 7 foot rock (Sheet 5344, Vol. 1, Page 24). A least depth of 9 feet was found on the charted 10 foot rock (Sheet 5344, Vol. 1, Page 25).

WIRE DRAG GROUNDINGS

All groundings of the drag were investigated with the hand lead. Because of the inexperience of the party in handling the drag, the drag was allowed to slacken at times and the bottom wire grounded. These groundings were also investigated with the hand lead. It was known when the drag grounded through faulty handling and the spots were again covered with the drag.

BOAT SHEETS

For the small amount of work done, the drag strips were plotted on Boat Sheet 2 (Hydrographic) and a photostat of Smooth Sheet 5344. It is believed that the office desired the smooth plotting done on existing sheets in the office.

STATISTICS

Date	Day letter	Miles Drag Strips	Positions
July 23	A (red)		41
" 24	B (red)	.75	13
July 31	A (green)		26
Aug. 1	B (green)	2.00	44
	<u>4</u>	<u>2.75</u>	<u>124</u>

Respectfully submitted,

George E. Morris, Jr.
George E. Morris, Jr.,
Lieut. (j.g.), C. & G. Survey.

Approved,

Wm. D. Patterson
Wm. D. Patterson,
Lieut., C. & G. Survey,
Chief of Field Party No. 5.

STATISTICS HYDROGRAPHIC SHEET NO. 5344

DAY	COLOR	DATE	VOLUME	STATUTE MILES	POSITIONS	SOUNDINGS
A	Green	July 17	1	3.9	36	63
B	"	" 18	1	9.4	49	172
C	"	" 19	1	2.3	19	74
D	"	" 31	1		2	2
E	"	Aug. 1	1		8	8
F	"	" 2	1	10.3	72	220
G	"	" 4	1	21.3	112	400
H	"	" 6	1&2	22.4	126	435
J	"	" 7	2	25.8	120	466
K	"	" 8	2	16.5	116	334
L	"	" 9	2	18.6	99	328

A	Purple	July 7	3		1	2
B	"	" 9	3	26.2	116	534
C	"	" 10	3	13.5	101	371
D	"	" 11	3	16.9	99	261
E	"	" 12	3	9.4	89	278

POSITIONS OF LAUNCH USED AS SIGNAL

G	Green	Aug. 4	4		14	14
H	"	" 6	4		14	14
J	"	" 7	4		13	13
K	"	" 8	4		11	11
L	"	" 9	4		9	9
---				-----	-----	-----
16				196.5	1226	4009

AREA 14.02 SQUARE STATUTE MILES

KAC

September 20, 1934.

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 5344 (Additional Work)

Locality Montauk Point, Long Island, New York

Chief of Party: W. D. Patterson in 1934

Plane of reference is mean low water, reading
2.2 ft. on tide staff at Great Pond Entrance
8.6 ft. below B. M. 2

2.2 ft. on tide staff at Greenport (Allowance made for time of tide at place
6.5 ft. below B.M. 2 of sounding)

Height of mean high water above plane of reference is
approximately 2.0 ft. -

Condition of records satisfactory except as noted below:

Trans Sept 13, 1934
W.D.P.

Paul Whitney

Chief, Division of Tides and Currents

Wm. Ellis

LAC

September 20, 1934

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in

2 volumes of ~~sounding records for~~ wire drag records for

HYDROGRAPHIC SHEET

5344

~~6907~~

(Additional Work)

Locality Montauk Point, Long Island, New York

Chief of Party: W. D. Patterson in 1934

Plane of reference is mean low water reading

2.2 ft. on tide staff at Great Pond Entrance

8.6 ft. below B. M. 2

2.2 ft. on tide staff at Greenport (Allowance made for time of tide at place
6.5 ft. below B.M. 2 of sounding)

Height of mean high water above plane of reference is

approximately 2.0 ft.

Condition of records satisfactory except as noted below:

Paul F. Whitney

Chief, Division of Tides and Currents

Survey No. H*5344

Chart No. 1211

Approved by the Division of Geographic Names, Department of Interior. ✱

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

(M-136)

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. *H.5344 (add. work)*

The following statistics will be submitted with the
cartographer's report on the sheet:

Number of positions on sheet	<i>.1226</i>
Number of positions checked	<i>...41.</i>
Number of positions revised	<i>....1.</i>
Number of soundings recorded	<i>.4009</i>
Number of soundings revised	<i>.....7.</i>
Number of signals erroneously plotted or transferred	<i>....0.</i>

Date: *12/20/34*

Verification by *IM Zeskind*

Time: *5 days 2¹/₂ hrs*

Review by *P. L. Johnston*

Time: *15 hrs*

VERIFIER'S REPORT ON ADDITIONAL WIRE DRAG WORK ON H-~~5907~~. 5344

Records and descriptive report for this work are filed under H-3907 but work was done on boat sheets of H-5515 and H-5344.

Records are poorly kept. Field party did not complete records according to specifications of the Wire Drag Manual. Length of upright is not entered in the records. Field party has tested for lift occasionally and entered their findings as length of upright. Descriptive report makes mention of setting uprights at 26 feet and with only $\frac{1}{2}$ foot of tide having an effective depth of 18.5 feet. This gives a lift of 7 feet and tends to discredit any drag depths recorded. Nowhere in the records do length of drag or length of towline appear. These figures were obtained from the descriptive report. Soundings obtained were recorded in records for H-5515 and H-5344 instead of being consistent and recording in a volume to accompany the drag volumes. Field party could have submitted smooth plotting of drag strips. Boat sheets were very sketchy and it is impossible to see how they knew whether or not they were covering the area.

Verifier plotted all drag strips run in the vicinity of Constellation Rock. None of these strips covered the position of 17 foot sounding as obtained from H-1590a. Overlay for H-5515 covering this work accompanies this report.

Strips run over Shagwong Rock proved little. A $\frac{1}{2}$ foot sounding was obtained but drag did not prove non existence of the ~~can~~ charted depth of 7 feet. Drag strips were not smooth plotted by verifier. Length of upright was not changed to clear shoal at lesser depth. Sounding is shown on H-5344.

Verifier plotted several strips roughly on Shagwong Reef as an overlay for H-5344. Fixes used in this section were very weak. Positions are shaky and can be moved 50 meters with only two or three minutes change in angles. Field party was attempting to verify or disprove a depth of 7 feet shown on H-1539 and a 10 foot depth shown on Chart 1211 (Letter 172 (1931)). The source of which is unknown to the verifier. Field party obtained two shoal soundings one of which (8') agrees fairly well with the ¹⁴⁰ position of the 7. The other (9') is about ~~200~~ meters N.E. of the charted depth of 10 feet. Drag strips in this area were very sketchy and verifier did not attempt to piece them together into a single overlay. Strips were run in an east and west direction. The most southerly strip covered the position of the 10' depth which

was transferred as ~~and~~ accurately as it could be obtained from the chart. Verifier ~~did~~ does not consider this sufficient coverage in view of the several factors tending to discredit the work in this area. No overlay is submitted for this area.

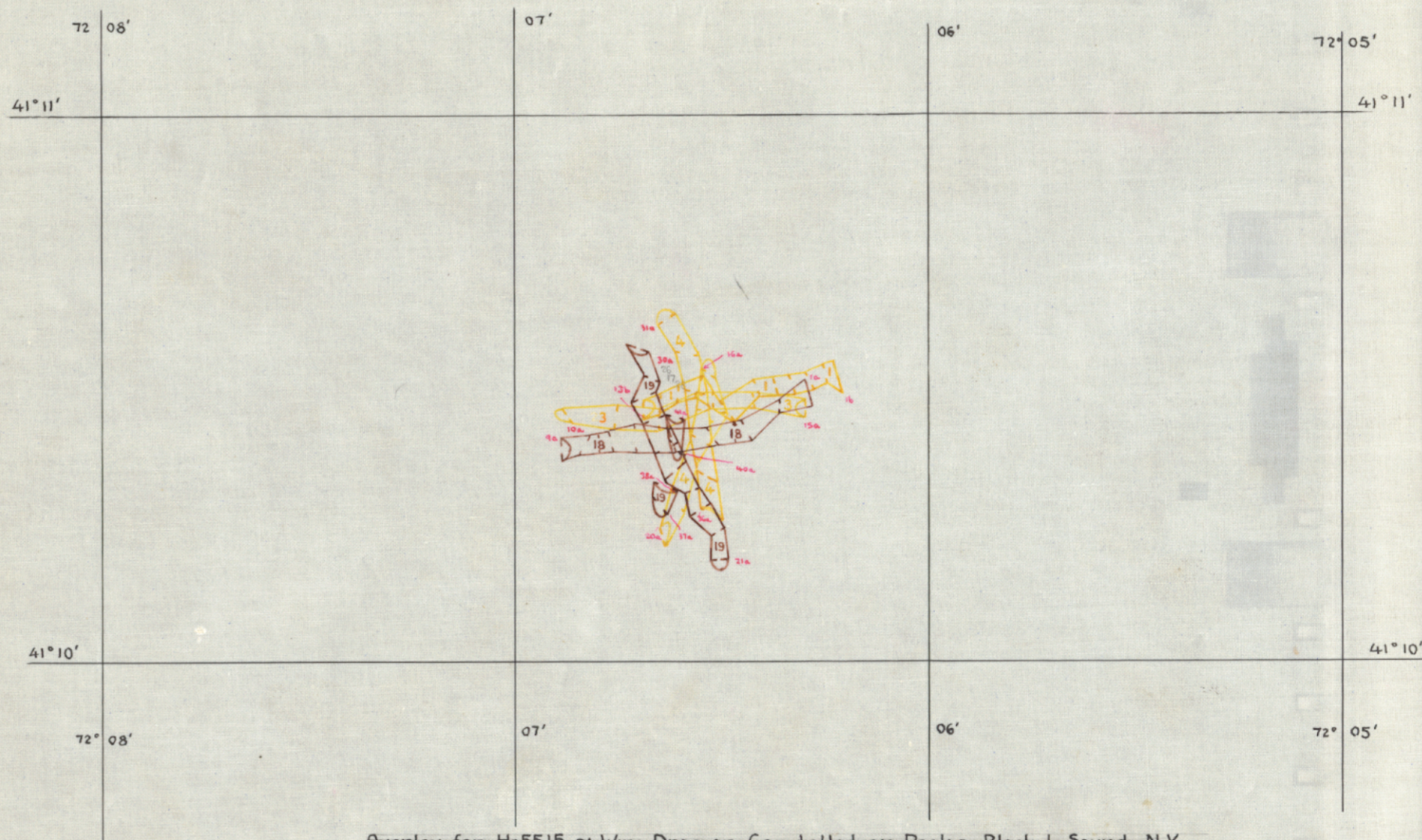
It is the opinion of Lt. C. K. Green that drag used was too short and that indications of excessive lift along with incompleteness of records would discredit this work even if the numerous little strips did piece together to apparently cover the shoal areas. Drag strips were not plotted on H-3902

Comdr. Colbert and Lt. Green concur in the opinion that the drag work is unsatisfactory and that soundings only are to be given any credence.

April 25, 1935. Submitted.

J. A. Mc Cormick

Time 20 hrs.



Overlay for H-5515 ~ Wire Drag on Constellation Rock ~ Block I. Sound, N.Y.

To Accompany Descriptive Report ~~H-3907~~ ^{H-5344} ~ Scale: 1:20,000

Report on st. 5344 (Add. Work) Dec 20, 1934.
Field Record Section

The records conform to the requirements of the General Instructions.

The usual depth curves can be completely drawn. In a few instances the depth curves are left in pencil because of conflict with previous work. These will be completed after this sheet has been reviewed.

The additional work was plotted in this office by L. S. Straw & was well done.

Crossings:

The crossings of the additional work agree fairly well. However, discrepancies occur between the additional work & previous surveys. Whenever conflict occurs the additional work sounding is left in pencil with a lead showing where the sounding plots.

Rocks:

Pencil notations which are self-explanatory have been made on this sheet relative to rocks. These rocks are also plotted on a tracing made in this office & which accompanies the boat sheet. Some of these rocks were not marked because of conflict with the previous survey. These rocks are left for the attention of the reviewer & will be marked after proper disposition has been made of same.

Rock A $\phi 41^{\circ} 02.12$ h $71^{\circ} 55.65'$ vol 1, Pg 4 - D. R. Add. Work.

The original survey shows the rock as "unken", while the additional work shows it as "awash at m.s.w.". The position of the rock on the ~~the~~ 2 surveys agrees. However, the sounding records or descriptive report do not show how this rock was located.

10A (new) $\phi 41^{\circ} 02.4$ h $71^{\circ} 54.4$ vol 1, pg 6. note relative to rocky shore does not definitely delineate extent of rocky shore.

Submitted,

W. J. Zerk

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5344 (Add. Work 1934-Wire Drag)

Eastern End of Long Island, Montauk Point, New York

Surveyed July-August, 1934

Instructions dated May 14, 1934 (W. D. Patterson)

Chief of Party - W. D. Patterson.

Surveyed by - G. E. Morris, Jr.

1. Scope of Survey.

The purpose of this additional work was to examine the charted 7 and 10 foot soundings in the vicinity of Shagwong Reef and the charted 7 foot sounding on Shagwong Rock, as noted in paragraph 9 (Sub-paragraph 1) of the review of H-5344 (1933) and also the charted 17 foot Constellation Rock (Within the limits of H-5515).

2. Results of Survey.

Because of the incompleteness of the records, the weak control, the use of a short drag and indications of excessive lift, the drag work is considered unreliable and has not been smooth plotted. (Concurred in by Chief of Division and Chief of Section). However, the soundings obtained in the vicinity of Shagwong Reef and Shagwong Rock, as a result of the drag grounding, have been retained and are recorded in the records for H-5344 (1933) and plotted on that sheet as additional work.

a. Vicinity of Shagwong Reef.

The drag set at an effective depth of 10 and 12 feet grounded three times in the vicinity of Shagwong Reef. The least depth found at the groundings was 8 feet (about 30 meters due east of the charted 7 foot sounding) and 9 feet. (approximately 140 meters northeast of the charted 10). These are recorded in the sounding records of H-5344 (Add. work 1934) and have been plotted on that sheet.

For disposition of 7 and 10 see Review H-5344, Additional Work (1934), par. 9 (1) a and 9 (1) b.

b. Vicinity of Shagwong Rock.

The drag grounded at an effective depth of 12.5 feet, but the least depth obtained was 12.5 feet. For disposition of the charted 7, see Review H-5344 (Ad. Work, 1934) par. 9 (1) f.

c. Constellation Rock.

The drag strips when plotted in the office entirely miss the charted 17 foot sounding (Constellation Rock). When work in this vicinity is resumed, Constellation Rock should be dragged again as recommended in the Review of H-5515 (1934).

3. Reviewed by L. S. Straw, April, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green, *C. K. Green*
Chief, Section of Field Records.

K.T. Adams
Asst Chief, Division of Charts.

acting. Paul G. Smith
Chief, Section of Field Work.

L. O. Robert
Chief, Division of H. & T.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5344 (ADDITIONAL WORK, 1934)

Montauk Point, Long Island, New York

Surveyed July 7 to August 9, 1934

Instructions dated May 14, 1934 (W. D. Patterson)

Hand Lead Soundings 3 Point Fixes on Shore Signals and Anchored Launch

Chief of Party - W. D. Patterson.

Surveyed by - G. E. Morris, Jr., D. S. Ling.

Protracted by - L. S. Straw.

Verified and inked by - I. M. Zeskind.

Condition of Records.

The records conform to the requirements of the Hydrographic Manual.
(W. D. records not included).

Purpose of Additional Work.

The purpose of this additional work was to investigate shoals and develop shoal areas which were left uncompleted during the season of 1933. This work was outlined in the review of the original survey.

Results of Additional Work.

The following paragraph numbers refer to the corresponding paragraphs under "Additional Work Recommended" in the review of the original survey:

Par. 9 (1).

A wire drag examination of the area off Shagwong Point was called for. Only two spots at Shagwong Reef and over Shagwong Rock were dragged and this drag work has been rejected as unsatisfactory by the office. (See attached review on Additional Wire Drag Work of 1934). In view of this, the following dispositions are made based on the additional hydrographic examinations:

- a. The 7 foot sounding (charted) on Shagwong Reef (lat. $41^{\circ}06.9'$, long. $71^{\circ}55.0'$) is apparently the result of an independent examination (date not given) which was plotted on both H-1529a (1882) and H-1539 (1882). The 1934 field party developed the area quite closely and also used the drag. They found an 8 foot rock approximately 70 meters east of the old 7. The 8 foot sounding is the shoalest of several drift soundings over the spot. Deeper depths were obtained over the old 7. The 8 foot rock is believed to be more accurately located and should replace the old 7 on the chart.

- b. A 10 foot rock is charted in lat. $41^{\circ}06.7'$, long. $71^{\circ}55.1'$ by authority of chart letter No. 172 (1931). It was located by a diver investigating loss of propellor due to hitting obstruction by a Coast Guard destroyer. Its position is given as 600 yards 228° (true) from Shagwong Reef. It is not clear whether the distance is from the reef or the buoy and there is no specific information regarding method of determination of distance. The party of 1934 located a 9 foot rock approximately ~~120~~¹⁴⁰ meters north of the charted 10. This is considered to be the same boulder referred to in the letter and the 9 foot rock should replace the 10 on the chart. (This rock is a part of Shagwong Reef).
- c. The 18 foot sounding (charted) on Washington Shoal in lat. $41^{\circ}06.4'$, long. $71^{\circ}54.5'$ originates with H-2313 (1897). It lies between wire drag soundings of 17 and 19 feet and falls in depths of 24 to 26 feet on the present survey. This sounding is on the western limits of the work on H-2313 (1897) where the control is weakest and may be out of its correct position. In addition, it is a single sounding at the end of a line. The 18 foot sounding should be disregarded in future charting.
- d. The 15 foot sounding (charted) on Washington Shoal in lat. $41^{\circ}06.09'$, long. $71^{\circ}54.53'$ is a single sounding on a line on H-1529a (1882). It falls in depths of from 19 to 22 feet on the present survey which shows depths of 17 feet close by. Because the area is irregular and the 15 has not been disproven, it should be retained on the chart.
- e. The 17 foot sounding (charted) in lat. $41^{\circ}05.75'$, long. $71^{\circ}54.35'$ is a single sounding on a line on H-1529a (1882) and is actually $17\frac{1}{2}$ feet. The present survey shows 18 feet in about the same position and should supersede the charted 17.
- f. The 7 foot depth charted over Shagwong Rock (lat. $41^{\circ}05.5'$, long. $71^{\circ}54.2'$) is the result of an examination in 1881 by Asst. G. Bradford, which was plotted on H-86 (1839). The actual depth was 7.7 feet. The rock was found with an improvised drag made with a boat hook, a buoy was dropped and the rock located. The $7\frac{1}{2}$ foot depth is also shown on H-1539 (1882) from the same source and according to a note on that sheet the rock was verified by Lt. Comdr. W. H. Brownson in 1883. (These records not found). The present field party examined the area with the drag (drag work rejected in the office, see review H-5344, (Ad. Wk. 1934 - W. D.), and the least depth found was $12\frac{1}{2}$ feet. The rock was cleared by a 10 foot drag and about $\frac{3}{4}$ hour spent in drift sounding. However, in view of the definite authority for the rock and the fact that the present drag was not considered dependable, the 7 foot depth should be retained until more conclusively disproved.

Par. 9 (2).

The wire dragging of the area east of Montauk Point was requested. This was not accomplished, however the hydrography was extended approximately 2 miles eastward. There appears to have been considerable general change in this area. The field party reports that the current has worn down the shoals and increased the general depths. (See Descriptive Report p. 3).

- a. The charted depth of 21 feet at Great Eastern Rock, lat. $41^{\circ}04.67'$, long. $71^{\circ}49.48'$ originates with H-2228 (1895) and H-2261 (1896). The least depth obtained by the present field party was 24 feet after an hour of drift sounding, in addition to the sounding lines run over the area. The 24 foot sounding should be accepted and should replace the 21 on the chart.
- b. The two 28 foot soundings (charted) at lat. $41^{\circ}05.15'$, long. $71^{\circ}49.8'$ and lat. $41^{\circ}05.05'$, long. $71^{\circ}50.37'$, as well as the 22 foot sounding (charted), which is actually 23 feet in the records of H-2261 (1896) pos. 185k, at lat. $41^{\circ}04.4'$, long. $71^{\circ}50.38'$, originate with H-2228 (1895) and H-2261 (1896), which sheets appear to be duplicates. All of these soundings fall in deeper depths on the present survey but the area is irregular and the new development is insufficient to disprove them. All of these soundings should be retained on the chart until more conclusively disproved.

Par. 9 (3).

The extension of the drag along the south shore westward of Montauk Point and the re-dragging of the shoal area on Montauk Shoal was requested. Neither of these was accomplished, however the shoal area on Montauk Shoal was rather closely developed with the hand lead. The least depth found was 32 feet. This development is now considered adequate and as this area appears to have changed the charted soundings from H-2228 (1895) and H-2261 (1896) should be superseded by those of the present survey. The most prominent in this category are the two 30 foot soundings (charted) in lat. $41^{\circ}01.85'$, long. $71^{\circ}49.85'$ and lat. $41^{\circ}01.85'$, long. $71^{\circ}49.85'$.

Par. 9 (4).

The 10 foot rock approximately 600 meters, 228° (true) from Shagwong Reef, was located and examined. (See par. 9(1)b of this review).

Par. 9 (5).

The sunken rock shown approximately on the 1933 boatsheet in lat. $41^{\circ}04.85'$, long. $71^{\circ}53.9'$ was definitely located and examined. ✓

Par. 9 (6).

The rock awash shown on H-2228 (1895) and H-2261 (1896) approximately 227 meters 31° (true) from Montauk Point L. H. was definitely located.

Par. 9 (7).

Rocks along the south^{shore} of Long Island which were approximately located in 1933 were more definitely located.

Par. 9 (8).

The extension of the 1916 drag limits in Block Island Sound southward and westward to the eastern side of Gardiners Island was not accomplished, however this area is now covered by a recent hydrographic survey, H-5515 (1934).

Charted Soundings (Chart No. 1211).

The following charted soundings were investigated during the season of 1934:

- (1) The 54 foot sounding (charted) in lat. $41^{\circ}00.9'$, long. $71^{\circ}52.3'$ originates with two soundings of 59 feet on H-74 (1838). It was first charted as 9 fathoms and when the depth unit of the chart was changed from fathoms to feet, it was erroneously carried forward as 54 feet. The field party spent three fourths of an hour in drift sounding over the area and obtained a least depth of 60 feet. This should be accepted and should replace the 54 on the chart.
- (2) The 60 foot sounding (charted) in lat. $41^{\circ}01.6'$, long. $71^{\circ}52.65'$ is a single sounding on a line of soundings on H-74 (1838). The present field party examined the area fairly closely and were unable to find any depth shoaler than 65 feet. This should replace the old 60 foot sounding on the chart.

Additional Work Recommended.

- (1) In view of the fact that the drag work in the area north of Shagwonk Point was rejected, the depth over Shagwonk Rock is not definitely established. (See par. 9(1)f of this review). The hydrography in the vicinity of Shagwonk Reef and Washington Shoal sufficiently develops those areas but Shagwonk Rock (lat. $41^{\circ}05.5'$, long. $71^{\circ}54.2'$) should be re-examined.

- (2) The area east of Montauk Point appears to have changed considerably and the present survey should be extended to the eastward. When this is accomplished, the soundings mentioned in par. 9(2)b of this review should be investigated.

Note to Compiler.

Attention is called to the fact that the rocks mentioned in Par. 9(5), Par. 9(6), and Par. 9(7) were only approximately located. These rocks have been definitely located in the 1934 additional work. Inasmuch as the 1933 work has already been applied to the chart, the latter should be corrected to conform to the delineation shown on the sheet (H-5344) at the present time.

Reviewed by - R. L. Johnston, May 20, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green, *C. K. Green*
Chief, Section of Field Records.

K. T. Adams
Actg Chief, Division of Charts.

Paul D. Smith
Acting Chief, Section of Field Work.

A. R. Ruppers
Act. Chief, Division of H. & T.

applied to ch. 362 RDG 9/9/49

*applied to chart 1211
July 12, 1955 g.K.S.*

*Appl. to ch. 271
April 4, 1966*